

(2) For any existing purified phosphoric acid process line, any of the following shall constitute a violation of this subpart:

(i) A thirty day average of daily concentration measurements of methyl isobutyl ketone in excess of twenty parts per million for each product acid stream.

(ii) A thirty day average of daily concentration measurements of methyl isobutyl ketone in excess of thirty parts per million for each raffinate stream.

(iii) A daily average chiller stack exit gas stream temperature in excess of fifty degrees Fahrenheit.

§ 63.603 Standards for new sources.

(a) *Wet process phosphoric acid process line.* On and after the date on which the performance test required to be conducted by §§ 63.7 and 63.606 is required to be completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected source any gases which contain total fluorides in excess of 6.750 gram/metric ton of equivalent P_2O_5 feed (0.01350 lb/ton).

(b) *Superphosphoric acid process line.* On and after the date on which the performance test required to be conducted by §§ 63.7 and 63.606 is required to be completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected source any gases which contain total fluorides in excess of 4.350 gram/metric ton of equivalent P_2O_5 feed (0.00870 lb/ton).

(c) *Phosphate rock dryer.* On or after the date on which the performance test required to be conducted by §§ 63.7 and 63.606 is required to be completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected source any gases which contain particulate matter in excess of 0.030 kilogram/metric ton per megagram of phosphate rock feed (0.060 lb/ton).

(d) *Phosphate rock calciner.* On or after the date on which the performance test required to be conducted by §§ 63.7 and 63.606 is required to be completed, no owner or operator subject to

the provisions of this subpart shall cause to be discharged into the atmosphere from any affected source any gases which contain particulate matter in excess of 0.0920 gram per dry standard cubic meter (g/dscm) [0.040 grain per dry standard cubic foot (gr/dscf)].

(e) *Evaporative cooling tower.* No owner or operator shall introduce into any evaporative cooling tower any liquid effluent from any wet scrubbing device installed to control emissions from process equipment. Each owner or operator of an affected source subject to this paragraph (e) must certify to the Administrator annually that he/she has complied with the requirements contained in this section.

(f) *Purified phosphoric acid process line.* (1) Each owner or operator subject to the provisions of this subpart shall comply with the provisions of subpart H of this part.

(2) For any new purified phosphoric acid process line, any of the following shall constitute a violation of this subpart:

(i) A thirty day average of daily concentration measurements of methyl isobutyl ketone in excess of twenty parts per million for each product acid stream.

(ii) A thirty day average of daily concentration measurements of methyl isobutyl ketone in excess of thirty parts per million for each raffinate stream.

(iii) A daily average chiller stack exit gas stream temperature in excess of fifty degrees Fahrenheit.

§ 63.604 Operating requirements.

On or after the date on which the performance test required to be conducted by §§ 63.7 and 63.606 is required to be completed, the owner/operator using a wet scrubbing emission control system must maintain three-hour averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant to the requirements of § 63.605(d)(1) or (2).

§ 63.605 Monitoring requirements.

(a) Each owner or operator of a new or existing wet-process phosphoric acid process line, superphosphoric acid

process line, phosphate rock dryer, or phosphate rock calciner subject to the provisions of this subpart shall install, calibrate, maintain, and operate a monitoring system which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ± 5 percent over its operating range.

(b)(1) Each owner or operator of a new or existing wet-process phosphoric acid process line or superphosphoric acid process line subject to the provisions of this subpart shall maintain a daily record of equivalent P_2O_5 feed by first determining the total mass rate in metric ton/hour of phosphorus bearing feed using a monitoring system for measuring mass flowrate which meets the requirements of paragraph (a) of this section and then by proceeding according to § 63.606(c)(3).

(2) Each owner or operator of a new or existing phosphate rock calciner or phosphate rock dryer subject to the provisions of this subpart shall maintain a daily record of phosphate rock feed by determining the total mass rate in metric ton/hour of phosphorus bearing feed using a monitoring system for measuring mass flowrate which meets the requirements of paragraph (a) of this section.

(c) Each owner or operator of a new or existing wet-process phosphoric acid process line, superphosphoric acid process line, phosphate rock dryer or phosphate rock calciner using a wet scrubbing emission control system shall install, calibrate, maintain, and operate the following monitoring systems:

(1) A monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ± 5 percent over its operating range.

(2) A monitoring system which continuously measures and permanently records the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to

have an accuracy of ± 5 percent over its operating range.

(d) Following the date on which the performance test required in § 63.606 is completed, the owner or operator of a new or existing affected source using a wet scrubbing emission control system and subject to emissions limitations for total fluorides or particulate matter contained in this subpart must establish allowable ranges for operating parameters using the methodology of either paragraph (d)(1) or (2) of this section:

(1) The allowable range for the daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system is ± 20 percent of the baseline average value determined as a requirement of § 63.606(c)(4), (d)(4), or (e)(2). The Administrator retains the right to reduce the ± 20 percent adjustment to the baseline average values of operating ranges in those instances where performance test results indicate that a source's level of emissions is near the value of an applicable emissions standard, but, in no instance shall the adjustment be reduced to less than ± 10 percent. The owner or operator must notify the Administrator of the baseline average value and must notify the Administrator each time that the baseline value is changed as a result of the most recent performance test. The baseline average values used for compliance shall be based on the values determined during the most recent performance test. The new baseline average value shall be effective on the date following the performance test.

(2) The owner or operator of any new or existing affected source shall establish, and provide to the Administrator for approval, allowable ranges of baseline average values for the pressure drop across and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system for the purpose of assuring compliance with this subpart. Allowable ranges may be based upon baseline average values recorded during previous performance tests using the test methods required in this subpart and established in the manner required in § 63.606(c)(4), (d)(4), or (e)(2). As an alternative, the owner

or operator can establish the allowable ranges of baseline average values using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in this subpart and established in the manner required in § 63.606(c)(4), (d)(4), or (e)(2). The source shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges of baseline average values developed pursuant to the provisions of this paragraph must be submitted to the Administrator for approval. The owner or operator must request and obtain approval of the Administrator for changes to the allowable ranges of baseline values. When a source using the methodology of this paragraph is retested, the owner operator shall determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters from previous tests. Any new allowable ranges of baseline average values resulting from the most recent performance test shall be effective on the date following the retest. Until changes to allowable ranges of baseline average values are approved by the Administrator, the allowable ranges for use in § 63.604 shall be based upon the range of baseline average values proposed for approval.

(e) Each owner or operator of a new or existing purified phosphoric acid process line shall:

(1) Install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the stack gas exit temperature for each chiller stack.

(2) Measure and record the concentration of methyl isobutyl ketone in each product acid stream and each raffinate stream once daily.

§ 63.606 Performance tests and compliance provisions.

(a)(1) On or before the applicable compliance date in § 63.609 and once per annum thereafter, each owner or operator of a phosphoric acid manufacturing plant shall conduct a performance test to demonstrate compliance with the applicable emission standard

for each existing wet-process phosphoric acid process line, superphosphoric acid process line, phosphate rock dryer, and phosphate rock calciner. The owner or operator shall conduct the performance test according to the procedures in subpart A of this part and in this section.

(2) As required by § 63.7(a)(2) and once per annum thereafter, each owner or operator of a phosphoric acid manufacturing plant shall conduct a performance test to demonstrate compliance with the applicable emission standard for each new wet-process phosphoric acid process line, superphosphoric acid process line, phosphate rock dryer, and phosphate rock calciner. The owner or operator shall conduct the performance test according to the procedures in subpart A of this part and in this section.

(b) In conducting performance tests, each owner or operator of an affected source shall use as reference methods and procedures the test methods in 40 CFR part 60, appendix A, or other methods and procedures as specified in this section, except as provided in § 63.7(f).

(c) Each owner or operator of a new or existing wet-process phosphoric acid process line or superphosphoric acid process line shall determine compliance with the applicable total fluorides standards in § 63.602 or § 63.603 as follows:

(1) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = \left(\sum_{i=1}^N C_{si} Q_{sdi} \right) / (PK)$$

Where:

E = emission rate of total fluorides, g/metric ton (lb/ton) of equivalent P₂O₅ feed.

C_{si} = concentration of total fluorides from emission point "i," mg/dscm (mg/dscf).

Q_{sdi} = volumetric flow rate of effluent gas from emission point "i," dscm/hr (dscf/hr).

N = number of emission points associated with the affected facility.

P = equivalent P₂O₅ feed rate, metric ton/hr (ton/hr).